2. (Amended) A pair of nucleic acid probes of comparable size, [each preferably being]said size being selected from the group consisting of from 1 to 100 kb, [more preferably each being] from 1 to 10 kb, [or] 7 to 15 kb, [or] 10 to 20 kb, [or] 10 to 30 kb, [or] 20 to 40 kb, [or] 30 to 50 kb, [or] 40 to 60 kb, [or] 50 to 70 kb, [or] 60 to 80 kb, [or] 70 to 90 kb, [or] and 80 to 100 kb, and flanking a potential breakpoint in a chromosome, which pair of nucleic acid probes hybridize to [said]a nucleic acid molecule at a genomic distance of from about 50 kb to no more than 100 kb[, but preferably no more than 50 kb].

Sub B'

3. (Amended) [A]The pair of nucleic acid probes of comparable size [according to]of claim 1 which pair of nucleic acid probes hybridise to [said]a nucleic acid molecule at a genomic distance of from about 50 kb to no more than 100 kb[, but preferably no more than 50 kb].

4. (Amended) [A]The pair of nucleic acid probes [according to anyone of claims 1 to 3]of claim 2, each of said pair of nucleic acid probes being labelled directly or indirectly with at least one reporter molecule.

5. (Amended) [A]The pair of nucleic acid probes [according to]of claim 4 wherein the at least one reporter molecule is selected from the group consisting of enzymes, chromophores, fluorochromes, and haptens [(such as biotin or digoxygenin)].

6. (Amended) [A]The pair of nucleic acid probes [according to any of claims 1 to]of claim 5 [characterized in that]wherein the probes hybridise to a single corresponding nucleic acid molecule.

7. (Amended) [A]The pair of nucleic acid probes [according to]of claim 6 wherein the single corresponding nucleic acid molecule is at least a fragment of a chromosome.

8. (Amended) [A]The pair of nucleic acid probes [according to]of claim 7 wherein the chromosome is not aberrant.

9. (Amended) [A]The pair of nucleic acid probes [according to any of claims 1 to 8]claim 1 which hybridise *in situ*.

10. (Amended) [A]The pair of nucleic acid probes [according to any of the claims above]of claim 9 which pair of probes each hybridise *in situ* under low-stringent conditions to only a few linear DNA molecules per cell.

11. (Amended) [Use]A method of detecting a nucleic acid molecule having a chromosomal aberration, said method comprising using of [a]the pair of nucleic acid probes of claim 1 [according to any of claims 1 to 10 for the detection of a nucleic acid molecule comprising a chromosome aberration]to analyze a sample believed to contain nucleic acid.

12. (Amended) [Use of a]A method of detecting cells suspected of having a chromosomal aberration, said method comprising analyzing said cells or said cell's nucleic acid with the pair of nucleic acid probes [according to any of claims 1 to 10 for the detection of cells comprising a chromosome aberration]of claim 1.

Please cancel claim 13.

14. (Amended) [Use of a pair of nucleic acid probes according to any of claims 11 to 13]The method according to claim 11 wherein the [chromosome]chromosomal aberration is related to a malignancy.

15. (Amended) [Use of a pair of nucleic acid probes]The method according to [any of claims 13 to 12]claim 12 wherein the [chromosome]chromosomal aberration is related to a hematopoietic malignancy.

16. (Amended) A diagnostic kit comprising at least [a]the pair of nucleic acid probes [according to any of claims 1 to 10]of claim 1.

Please add the following new claims:

17. The pair of nucleic acid probes claim 1 wherein the probes hybridise to a single corresponding nucleic acid molecule.

18. The pair of nucleic acid probes of claim 17 wherein the single corresponding nucleic acid molecule is at least a fragment of a chromosome.

19. The pair of nucleic acid probes of claim 18 wherein the chromosome is not aberrant.

20. The pair of nucleic acid probes claim 3 wherein the probes hybridise to a single corresponding nucleic acid molecule.